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Federal-State Marketing Improvement Program (FSMIP)
Agricultural Marketing Service, United States Department of Agriculture

Title:



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The Florida Department of Agriculture and Consumer Services

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Abstract (Final Report for Agreement #12-25-G-0416)

Since the production of citrus has not experienced recent growth, the USDA citrus breeding program decided to develop an early ripening, sweeter grapefruit hybrid in Florida. The current state of the grapefruit market is attributed to poor quality and bitter taste in early season fruit. A younger niche market may exist for the early ripening, low acid, non-bitter "Early Sweet." The goal is to help Florida grapefruit growers create a new market of grapefruit customers by developing a new variety for people who currently don't like the taste of grapefruit.

This new grapefruit, called "Early Sweet" (variety 77-19), has a unique sweet flavor, is nearly seedless and is medium in size. The smooth yellow peel and firm cream-yellow flesh pulls away easier from the rind than standard grapefruit. The fruit ripens earlier than traditional grapefruit, which would extend a grower's season as well as create a new product line. The flavor is mild and low acid with a non-bitter albedo (the spongy white tissue on the inside of the rind). This new variety is currently being grown in test groves managed by the USDA's Horticultural Research Center in Fort Pierce, Florida.

The Florida Department of Agriculture and Consumer Services (FDACS) conducted preliminary taste tests in select Florida venues with Early Sweet in 2002. When the results proved overwhelmingly positive for all age groups, FDACS requested and received FSMIP funds in 2003 to identify new market opportunities and explore potential domestic markets for this grapefruit hybrid. According to this initial domestic research, there is great potential for its success. It was determined that the capital investment and entrepreneurial risk associated with establishing grapefruit groves and marketing a new grapefruit variety would be minimized by additional consumer acceptance research of the Early Sweet variety. Continuing research efforts by exploring international markets would also provide valuable data and assist in collecting the information necessary in order to begin developing a consumer interest base outside the United States.

FDACS requested and received FSMIP funds in 2004 for additional consumer research to be conducted internationally in order to verify the preliminary domestic research results. Venues in Canada, France and Japan were chosen and taste test and surveys were scheduled and conducted. This research shows the Early Sweet as the clear winner, scoring highest in the "liked best" category when compared to the Pomelo/White Grapefruit and the Red Grapefruit, especially among the younger respondents (Generation Y: age 11-26) and those adults who typically do not care for grapefruit. The potential success for Early Sweet as a new product line for citrus growers in the grapefruit markets was confirmed on an international level by these findings.

Project Description

To create awareness in Florida's citrus producers of the international market potential of the new citrus variety and to contribute support to the economic sector. This will be accomplished through consumer preference research and a report of economic potential.

Goals and Objectives

- To identify and assess international market potential.
- To identify international market segments with the most potential interest in Early Sweet.
- To identify the strongest international marketing point of Early Sweet Grapefruit.
- To identify the most popular international consumption venues for the Early Sweet Grapefruit.
- To evaluate potential impact on Florida producers.

Plan of Work

- Identify and examine three international consumer markets: Canada, France and Japan.
- Refine existing interview instrument in order to develop an international interview instrument.
- Schedule appointments within the market areas selected and send market research teams to interview the key demographic groups stratified by age and ethnic background.
- Compile the market research from the interviews in the selected market areas and publish the findings.

Expected Outcome

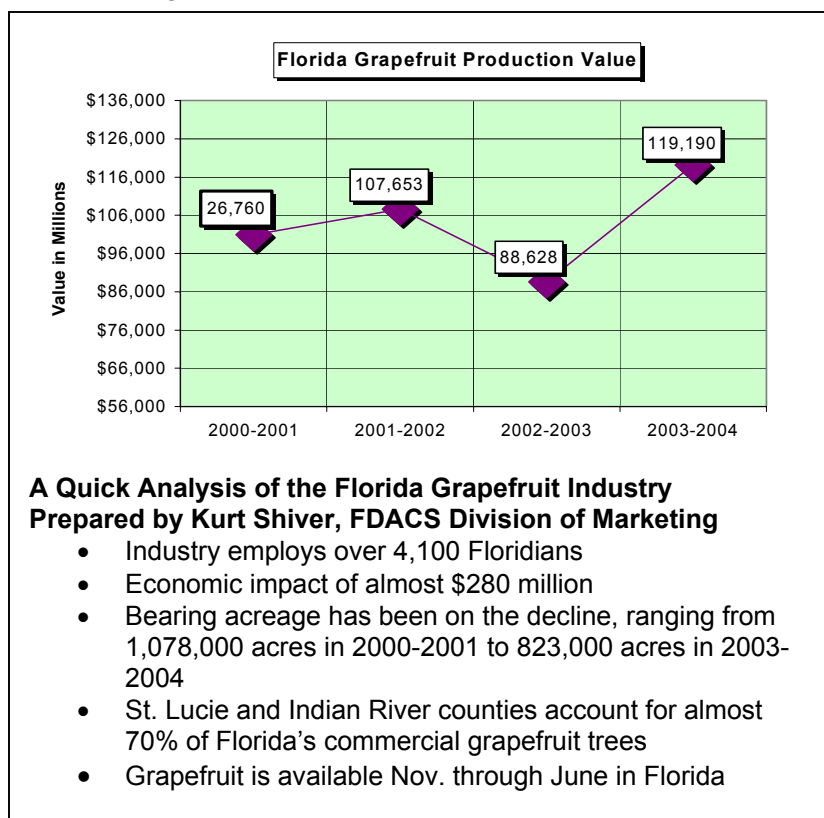
- To evaluate the market penetration of Early Sweet Grapefruit in international markets.
- To increase fresh market grapefruit sales for Florida producers.

Success To Be Measured By:

- Identifying international market segments that have a significant interest in this new grapefruit.
- Quantifying international market potential for the new grapefruit in interested market segments.
- Distributing data to prospective Florida citrus growers.

Background and Justification

Florida is the United States' leading producer of grapefruit with almost 80 percent of the domestic production in 2001/02. The U.S. is the dominant grapefruit producer with almost 63 percent of the global production. Florida citrus producers are suffering through an extended period of declining "real prices" and profits for all varieties of grapefruit. Grapefruit acreage has dropped continuously for the last eight years. The 2002 production commitment (105,488 acres) was down almost 40 percent from the 1994 level. To compound the problem, the grapefruit groves are declining in value while other Florida agricultural land increases in value. The chronic loss of market and the declining asset value threaten the economic stability of the grapefruit production regions.

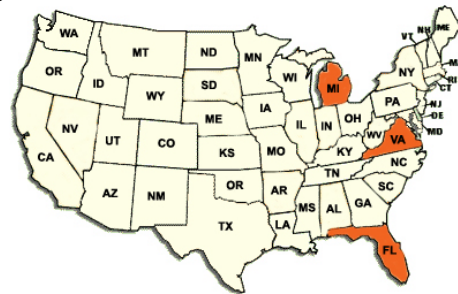


The USDA's Citrus Breeding Program in Fort Pierce, Florida, developed a new grapefruit hybrid known as "Early Sweet" designed to counter the downward economic spiral. Initial consumer preference testing conducted by FDACS indicated positive market potential for the new variety. Further acceptance testing determined that the prospective level of market penetration and latent sale possibility for this new variety is very positive both on the domestic and international level. Details on the market findings of this project, spanning nearly 3 years of intensive consumer research, are presented in this report.

The Domestic Survey (2003-2004)

The purpose of the survey was to determine the response of adults, elementary school students and high schools students to a new hybrid citrus fruit; working name "Early Sweet."

Several tasting sessions were conducted in Tallahassee, Florida; Ft. Myers, Florida; Richmond, Virginia; and Kalamazoo, Michigan. Respondents included adults who purchased most of the household groceries, students in the fourth and fifth grades, and students who were juniors and seniors in high school.



Participants were assembled in a neutral setting, provided a briefing on the course of events, and an explanation of the survey instrument. The neutral setting allowed samples to be stored out of sight and removed after each module of the instrument was completed. Samples were not identified until after survey instruments were completed and submitted.



Respondents were given tastes of each fruit in a prescribed order. All respondents tasted fruit in the same order:

- a. Sample A: White Marsh Grapefruit
- b. Sample B: Ruby Red Grapefruit
- c. Sample C: Early Sweet Grapefruit

Between each sample of the fruit respondents were given bottled water and plain, salt free crackers to cleanse their pallets.

At the conclusion of the Survey (approximately 30 minutes), each participant handed in a completed tabulation sheet. The survey instruments were secured prior to thanking the group and adjourning the meeting.

This consumer preference testing indicates positive market potential for the new variety. The profile of current grapefruit consumption leaves much of the market potential untapped. Interview respondents saying they consume grapefruit once monthly to never was 87%. Only 12% said they were eating grapefruit once a week or more frequently.

Survey indicators gave Early Sweet a much higher purchase and consumption potential. The research suggests that consumers would eat Early Sweet Grapefruit once a week or more often, most likely for a snack or breakfast. A profile of the typical prospective Early Sweet consumer would be under 25 years of age, someone who prefers a sweet citrus variety, but eats it only once or twice a month, or less.

Test subjects preference for grapefruit gave Early Sweet a decisively favorable rating. The majority of the participants (76%) chose the Early Sweet as the preferred sample, citing flavor and juiciness as the impetus. Eighty-four percent of the respondents said they preferred the sweeter citrus varieties of oranges/temples (49%) and tangerines/tangelos (36%), while only 8% preferred grapefruit. While the percentage of respondents preferring oranges/temples was consistent with national figures, the 8% who preferred grapefruit was low compared to the 21% national average.

When compared with other contemporary citrus fruit in the market place, 65% of respondents rated Early Sweet Grapefruit as better than their favorite citrus fruit. The flavor was rated by 70% of the respondents as the favorite feature of the Early Sweet Grapefruit.

The test respondents had well defined preferences for when they wanted to eat Early Sweet Grapefruit. A snack was the first preference with 74% of the respondents and 51% indicated breakfast. On this question respondents were encouraged to list more than one consumption venue if applicable.

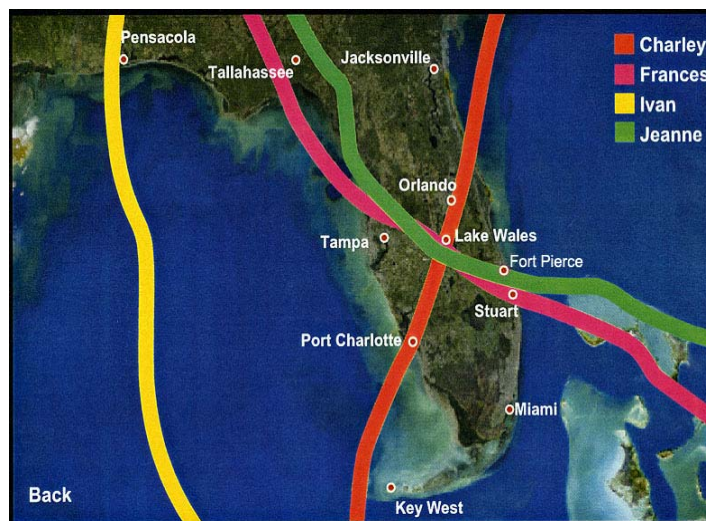
According to this initial domestic research, there is great potential for the success of this hybrid grapefruit variety. Conclusions to this segment of the domestic-based research indicated that continuing research efforts by exploring international markets would provide valuable data and develop a consumer interest base outside the United States.

The Florida Department of Agriculture and Consumer Services (FDACS) requested and received FSMIP funds in 2004 for additional research in order to verify the preliminary results of the domestic Early Sweet surveys on an international level.

Unexpected Delays and Impediments

2004 Hurricanes

The ferocity of the 2004 Atlantic hurricane season broke records and topped predictions. "The 2004 season was one to tell your grandchildren about," said National Hurricane Center director Max Mayfield. For the first time since record keeping began, Florida was hit by four hurricanes and one tropical storm, causing at least 100 deaths and more than \$40 billion in damage. Fourteen named storms formed during the June 1 - Nov. 30 season, with nine of them reaching hurricane strength, and six of them becoming "major" storms – more than the two-to six major storms government scientists had forecast at the start of the season. There were eight tropical storms in August alone, another new record. (Credits: CBS News, Associated Press, National Oceanic and Atmospheric Administration)



The National Hurricane Center's 2004 Atlantic Tropical Season Summary: 15 named storms, nine hurricanes, and six intense hurricanes.

The USDA's Horticultural Research Laboratory / Citrus Breeding Program in Fort Pierce, Florida did not release the 2004 Early Sweet crop due to post harvest complications, including two near direct hurricane hits over the grove area where the Early Sweet (variety 77-19) is produced. The first storm arrived within a few weeks of the start of harvest. Fruit drop and limb breakage occurred and the

availability of Early Sweet was reduced. Since the production window for Early Sweet is September through December, the next available crop was not expected until September 2005. Logistical planning was in progress, but on the ground research could not be scheduled to take place until a harvest date for the fruit was projected and confirmed.

2004 Citrus Canker Threat

Though no quarantine procedure was announced or enforced as of February 2004 for Early Sweet, there was a great deal of concern about the spread of citrus canker, which is caused by a bacteria and creates rust-colored scabs on leaves and fruit. In Fall 2004, a wave of new canker outbreaks was reported across Florida after hurricanes Charley, Frances and Jeanne. There was also a great deal of worry expressed by members of the Citrus Canker Technical Advisory Task Force that the eradication program may lack enough money and manpower to keep pace with the spreading bacterial disease.

2004 Stem End Fungus

Post harvest handling of Early Sweet also proved challenging. Washing the fruit spreads a fungus through the stem end and results in the loss of approximately 25 percent. This weakness would normally condemn commercial potential for a variety, but the extremely positive consumer acceptance reported in the domestic research project (2003-2004) spurred the search for an acceptable post-harvest handling methodology. Alternatives to the post-harvest handling are currently being studied for the most efficient method. To date, hand washing, drying and packing each piece of fruit is practiced.

Supplier Commitment

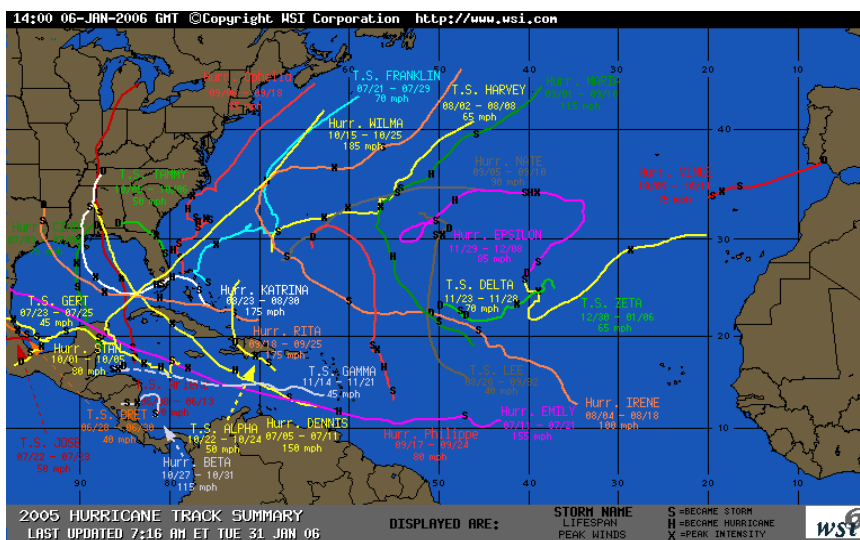
Greg McCullum at the USDA's Horticultural Research Center in Fort Pierce, Florida is the current FDACS contact for acquiring Early Sweet Grapefruit samples for consumer acceptance testing. During an onsite visit in January 2005, McCullum committed to 15 cases and asked that we make contact with him again in July 2005 to confirm the details. After the July confirmation, the proposed plan was to contact Foreign Agricultural Service representatives stationed in Japan, Canada and France in order to begin logistical planning for fruit shipments.

Grant Extension

A progress report and a request for an extension were submitted to Janise Zygmunt of the USDA's Federal-State Marketing Improvement Program (FSMIP) in February 2005. Early Sweet's post harvest complications were cited as impediments for implementing the international research program, including near direct hurricane hits over the grove area, citrus canker threat, and stem end fungus. On March 28, 2005, FDACS received notification that the extension had been approved and the agreement was amended to include a new completion date of December 15, 2005 and a final report deadline of March 31, 2006, effective May 1, 2005.

2005 Hurricanes

The 2005 season featured 14 hurricanes, including Katrina, which devastated Louisiana and Mississippi in August and became the most costly disaster in U.S. history. The seven most intense hurricanes recorded for 2005 included Wilma, Rita and Katrina. This season was also documented as having the lowest pressures for Atlantic hurricanes on record and the strongest hurricanes on record prior to August (Dennis & Emily).



This hurricane season is tied for second busiest on record since record keeping started in 1851. The record for tropical storms and hurricanes in one year is 21, set in 1933. Storms brought high winds and heavy rain, blowing fruit off the trees, breaking limbs, and uprooting trees. Standing water in groves caused softening of fruit and continued fruit droppage. Fruit drop rate was a limiting factor for citrus production in Florida, remaining at above average rates for most of the 2004-05 season. (Credits: CBS News, Associated Press, National Oceanic and Atmospheric Administration, USDA/NASS)

2005 Citrus Canker Threat

On June 27, 2005, citrus canker was discovered in a University of Florida citrus grove at the Indian River Research and Education Center (IRREC) in the Fort Pierce, Florida area during a voluntary inspection. State regulations forced the center to remove and burn all trees within a 1,900-foot radius encompassing its entire 100-acre grove. It will be another two years before replanting can occur, and it will be three to five years after replanting before those trees are mature and able to bear enough fruit for research.

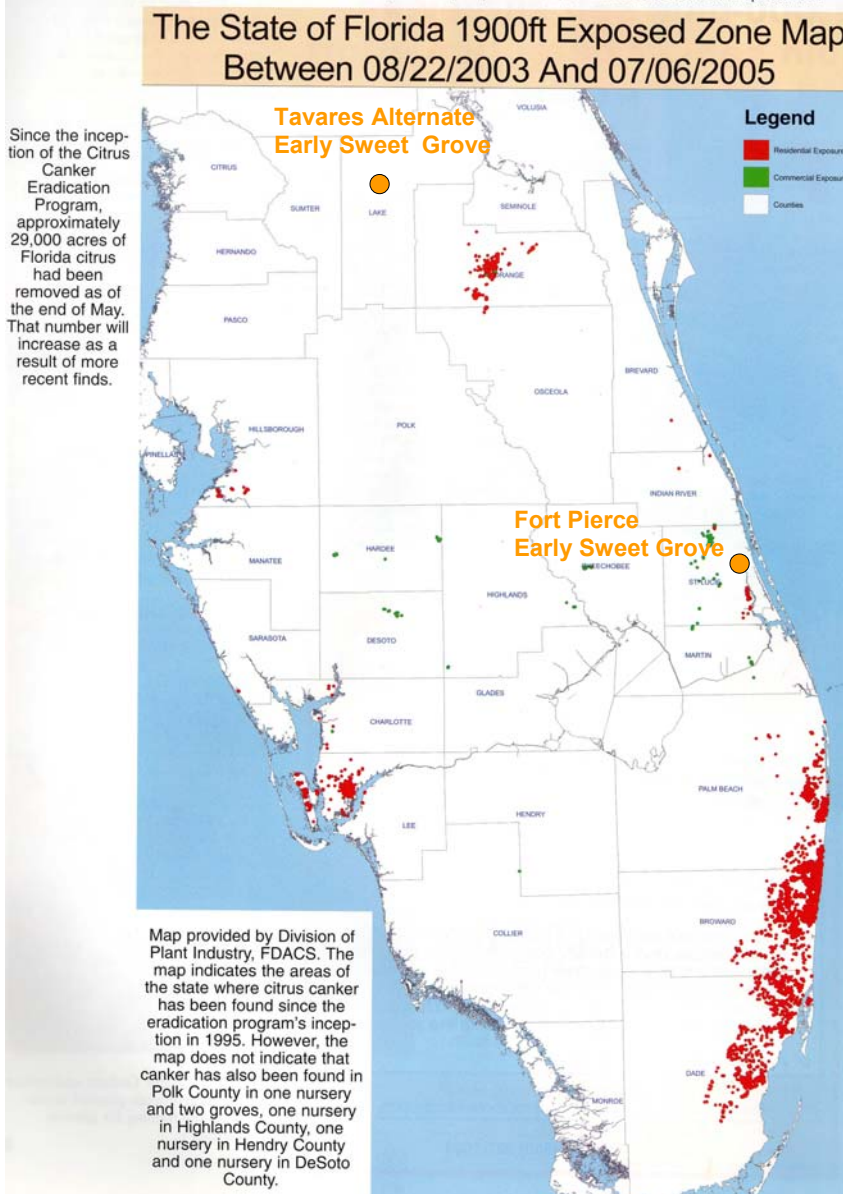
After canker was confirmed at the IRREC on June 30, 2005, it was determined that the citrus research programs (including the Early Sweet Grapefruit test groves) at the USDA Horticultural Research Laboratory adjacent to the IRREC were also vulnerable to the effects of canker infection. Fortunately, a large portion of the research being conducted is located outside the lab complex in collaboration with commercial groves along with the cooperation of private industry. Most of these sites had not yet been compromised by canker.

Supplier Commitment

Harold Browning, the statewide coordinator for the University of Florida citrus programs, along with

Greg McCullum, were consulted in order to locate another grove and grower cooperator in the area that was involved in the Early Sweet project. This proved challenging. However, an alternate test grove was located farther north in Tavares, FL in Lake County. The grove's owner, Mr. Barney Greene, of Green River Marketing, a large citrus producer and international citrus shipping company, agreed to cooperate and committed to ship 15 cases of Early Sweet, 5 cases for each international test location. Foreign Agricultural Service representatives stationed in Japan, Canada and France were contacted in order to begin logistical planning for the fruit shipments and to determine the entry requirements for shipping grapefruit into each country. Test shipments to each location were prepared and sent during the month of July 2005. Some test shipments were rejected due to newly revised inspection standards. Further

Information about recent canker finds or quarantine areas is available from Denise Feiber with the Division of Plant Industry at (352)372-3505, ext. 102; the Canker Helpline at (800)282-5153; or www.doacs.state.fl.us/pi/canker.



research and dogged determination by Greg McCollum and FDACS representatives resulted in successful shipments to all three international test locations.

Phytosanitary Certification

USDA/APHIS officials and representatives from the FDACS Division of Plant Industry were contacted to schedule immediate citrus canker inspections in the alternate grove for phytosanitary certification. An Application for Inspection and Certification of Domestic Plant and Plant Products for Export (PPQ Form 572) was completed to provide the information needed to complete the phytosanitary certificate and to serve as a worksheet for the certifying official conducting the inspection. Through the issuance of a phytosanitary certificate, an exporting country is verifying that the shipment has been inspected and conforms to the phytosanitary import requirements of the United States. Other countries have additional health import requirements and science-based standards that ensure domestic agricultural exports are protected from unjustified trade restrictions. The country-specific regulations, shipping requirements, and end results are detailed in the individual international survey venue descriptions that follow.

The International Survey (2004-2005)

Interview venues in Canada, France and Japan were selected to maximize controlled data collection while obtaining a good cross section of respondents. General key factors included mirrored those considered for the domestic research:

- Geographic diversity: a consideration to account for regional variations in taste preferences.
- The population's age distribution: previous research indicates that age is an important factor for fresh fruit consumption, especially the ages ranging <15 and 65+
- Personal income distribution: the new variety will probably be more expensive than varieties currently on the market, so median and mean income in combination with the cost of living must indicate an ability to purchase a premium product.
- Imports from the US: including fresh citrus fruit shipments

Once again, the purpose of the survey was to determine the response of a cross section of the population (adults, teens and children) to a new hybrid citrus fruit; working name "Early Sweet." An interpreter was hired to translate the survey into French and Japanese (samples are attached). Bilingual facilitators were sub-contracted to assist participants and FDACS representatives at the test sites in all three locations.

Several tasting sessions were conducted in Calgary, Alberta, Canada; Paris, France; and Tokyo, Japan. Respondents included adults who purchased most of the household groceries, students ages 11-26 ("Generation Y" consumers), and seniors ages 55+.



Calgary, Alberta, Canada



Paris, France



Tokyo, Japan

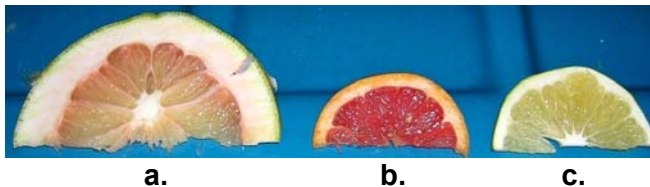
Methodology

Participants were assembled in a neutral setting, provided a briefing on the course of events, and an explanation of the survey instrument. The neutral setting allowed samples to be stored out of sight and removed after each module of the instrument was completed. Samples were not identified until after survey instruments were completed and submitted. Prior to the taste test, participants were asked to

complete a short questionnaire in order to collect general demographic information and determine their usual habits regarding the consumption of fruit and citrus fruit.

Respondents were given tastes of each fruit in a prescribed order. All respondents in Canada and France* tasted fruit in the same order:

- a. Sample A: Pommelo
- b. Sample B: Red Grapefruit
- c. Sample C: Early Sweet Grapefruit



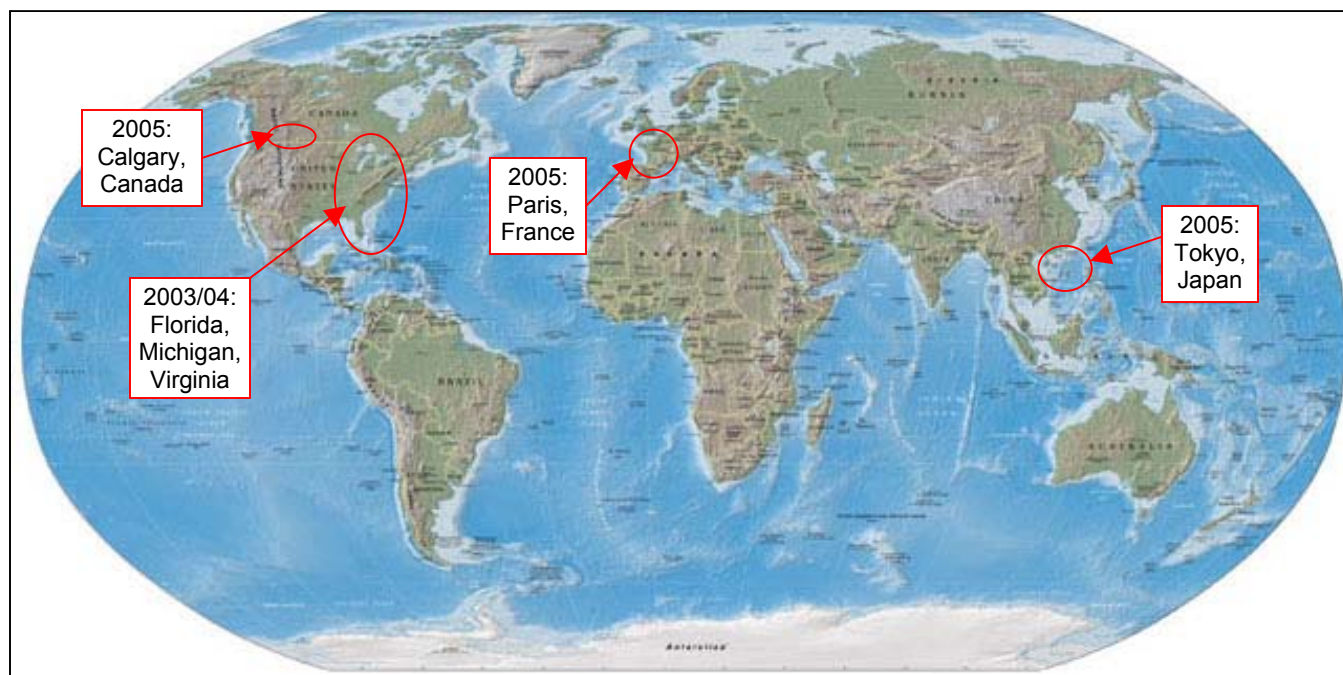
(*In Japan, the samples were renamed and the order was switched. Please see the section of this report on the Japanese survey that begins on page 18 for further details.)

Between each sample of the fruit respondents were given bottled water and crackers to cleanse their pallets.

At the conclusion of the Survey (approximately 30 minutes), each participant handed in the demographic questionnaire and the completed survey sheet.

Specifics regarding the procedures, problems encountered, survey results and lessons learned in each international location are detailed in the sections that follow.

Early Sweet: Worldwide Test Taste and Survey Locations Executed 2003 through 2005



Early Sweet was an overwhelming success in all test locales. The initial indicators of this positive response from cross sections of the population in select countries around the world show that Early Sweet would be well-received by consumers. If proper marketing techniques that target Generation Y consumers (age 11-26) are utilized, this new variety represents excellent potential as a new product line for citrus growers.

Canada: October 2–5, 2005



Population: 32,805,041

Age distribution: <15: 17.9%; 65+: 13.2%

Per capital GDP: \$31,500

Imports from the US: 84.6% of \$260.5 billion

Fresh citrus fruit imports: totaled 69,860 boxes for the 12/29/03 – 01/04/04 season



Calgary, Alberta, Canada

As an affluent, high-tech industrial society, Canada closely resembles the US in its market-oriented economic system, pattern of production, and high-living standards. Given its natural resources, skilled labor force, and modern capital plant, Canada enjoys solid economic prospects. Studies have also proven that Canadian consumers are willing to pay more for quality fresh produce.

Fresh produce marketers are addressing the demands of the Generation Y, those people born between 1980 and 1995 (ages 11-26). Research indicates that this group seems to have a great influence on household buying choices, particularly in food. Some members of this age segment are very ecology-minded, and are strong advocates of vegetarianism, natural products and animal rights. These young people are slightly better educated than the norm, have a higher than average income and are concerned about what they eat.

The 1989 US-Canada Free Trade Agreement (FTA) and the 1994 North American Free Trade Agreement (NAFTA) touched off a dramatic increase in trade and economic integration with the US. All fresh fruits and vegetables from the United States now enter Canada duty free. Due to the varied climate in Canada and a short growing season, imports play a critical role in the fresh produce industry. Seventy-five percent of the fresh produce sold in Canada is imported. Sixty-six percent of all imports of fresh fruits and vegetables are from the United States, a large portion of which is Florida citrus, mostly Florida pink grapefruit.

Canada is the No. 1 market for U.S. agricultural exports. In FY2003, U.S. agricultural exports to Canada reached a record \$9.1 billion, registering an average annual growth rate of 5.0 percent over the last seven years. Agricultural exports to Canada accounted for 16% of total U.S. food and agricultural product exports of \$56.2 billion. Consumer-oriented agricultural products accounted for 70 percent of total U.S. food and agricultural product sales to Canada in FY2003, with fresh and processed fruits and vegetables, snack foods, and red meat products as the category leaders. American products account for more than two-thirds of total Canadian agricultural imports.

Independent Contractor

This mission was originally scheduled for September 16-21, 2005 with an independent market research firm who committed to assist in Canada, France and Japan. When the contractor determined they were not able to perform the Canadian portion of the project, the research was rescheduled to take place

October 2-5, 2005 with a second contractor located in Calgary, Alberta, Canada. Two FDACS representatives (Kim Humphrey and Sterling Tyler) traveled to the test site to provide supervision and guidance, confirm the integrity of the survey implementation, assist, and take photographs.



Sheila Weaver, CMRP, Weaver Marketing Research

The contract stated:

Weaver Marketing Research will conduct 4 culinary focus groups in Calgary, Canada and provide a written report of the findings. The Contractor will need to predetermine the participants for the focus groups using specific demographic information and screening tests for recruitment, provide recommendations and implement planning and logistics required to complete this task. Contractor will provide facility, moderators, hostess, supplies, and grapefruit to test against the Early Sweet variety.



Left to right above:
Pomelo, Red Grapefruit, Early Sweet

Shipping Early Sweet to Canada

- Citrus (oranges, grapefruit, limes, lemons) are unrestricted.
- Canada does not require a Phytosanitary Certificate.
- Test shipment sent and accepted July 2005.
- Early Sweet shipment of five boxes each containing approximately 40 pieces of fruit for a total of 200 pieces arrived on September 26, 2005 in Calgary, Alberta, Canada.
- Contractor signed for the shipment and transported it to the test site.

The Canadian Survey

Six controlled focus groups were conducted among members of the general public, divided by age groups as follows: 10-11 year olds, 15-16 year olds, 20-40 year olds, and 41-65 year olds. Each group was mixed by gender and by socio-economic situation. Respondents were screened for at least occasional citrus fruit consumption and for absence of citrus sensitivity.

Cross sections
of Early Sweet



Ages 20-40



Ages 10-11



Ages 15-16



Ages 41-65

The project design, moderators discussion outline and taste test questionnaires were provided by FDACS in both English and French (see attachments). Early Sweets were shipped to Calgary by FDACS. Other samples used in the focus groups (Pomelos and Red Grapefruits) were purchased from Calgary stores by the moderator.

Early Sweet was the clear winner, scoring highest in the “liked best” category when compared to the Pomelo and the Red Grapefruit, especially among the younger respondents and those adults who typically do not care for grapefruit. Teens and particularly children found the Early Sweet to be “really good” and several asked for a third or fourth taste sample. While the older (41-55 year old) taste testers said they liked the Early Sweet, several also commented that “it did not taste like a grapefruit” to them, that they were expecting the tart taste of grapefruit that they were accustomed to.

The feature liked best about the Early Sweet was its flavor. Compared to their current consumption of grapefruit, all age groups said they would like to eat Early Sweet “more often.” The majority of participants who fell into the ages 15-40 category specified they would eat Early Sweet “much more often.”



Group Discussion – Typical Comments about the Early Sweet



41 to 65 Year Old Respondents

- Tastes like a lime and grapefruit cross
- Tastes like a maybe an apple or melon and grapefruit cross
- If blindfolded, I would not know it was a grapefruit
- They'd need information sheets to consumers about this - how to tell if its ripe etc
- I like the size
- The sections are too small - I could not use a spoon to eat it
- It's not the right color - looks unripe
- When eating grapefruit, I want it to taste like grapefruit
- I'd prefer larger bigger grapefruit
- I would definitely buy this - depending on cost of course

20 to 40 Year Old Respondents

- I hate grapefruit, but I really do like Early Sweet!
- I would buy it
- It didn't taste anything like grapefruit - I want grapefruit to taste like grapefruit
- Typical grapefruit eaters might not buy this
- Non grapefruit eaters would eat this one
- It looks unripe
- I would need an information sheet about it
- It's a bit similar to lemon or lime
- I might buy this - all depends on the price



15 to 16 Year Old Respondents

- It doesn't leave an aftertaste like the others
- Its sweet/ more sweet
- It tastes like a lemon or lime cross
- It looks like a lime or orange-type fruit
- People who eat grapefruit would eat this one more than regular grapefruit
- I found it had no flavor - bland
- I don't like blemishes on the skin of my fruit
- This isn't something you could travel with - its not a travel food
- All that thick white stuff - bad
- It seems soft on the outside - not good

10 to 11 Year Old Respondents

- Yum - it tastes like sour candy
- Its sweet and sour at the same time
- Juicy
- It tastes better than apples and bananas
- I would like my parents to buy it
- The smell is different than the other kinds
- Its just a little bit sour

EARLY SWEET GRAPEFRUIT

Weaver
marketing research

France: October 15-22, 2005



Population: 60,656,178

Age distribution: <15: 18.4%; 65+: 16.4%

Per capital GDP: \$28,700

Imports from the US: 5.1% of \$419.7 billion (2004)

Fresh citrus fruit imports: totaled 100,662 boxes
for the 12/29/03 – 01/04/04 season



Paris, France

France is in the midst of transition, from a well-to-do modern economy that has featured extensive government ownership and intervention to one that relies mainly on market mechanisms. France's leaders remain committed to capitalistic atmosphere in which they maintain social equity by means of laws, tax policies, and social spending that reduce income disparity and the impact of free markets on public health and welfare. The current government has lowered income taxes and introduced measures to boost employment.

France offers niche market opportunities for U.S. exporters. In general, the commercial environment in France is favorable for sales of U.S. goods and services. American sales concepts are increasingly impacting French marketing practices and distribution channels. The French market for food products is mature, sophisticated and well-served by suppliers from around the world. Additionally, an increasing interest in American culture, younger consumers and changing lifestyles are contributing to France's import demand for food products from the United States. The "young" generation (26 percent) tends to be curious and enjoy trying new products. This generation values products with an image along with "good" taste.

Off-season and extended-season sales, as well as years of short French fruit crops, represent the best opportunities for U.S. suppliers. France is one of the most important markets for U.S. grapefruit (mostly from Florida), valued at 35 million Euros (\$33 million) in 2002, representing 29 percent of total French imports.

Independent Contractor

This mission was scheduled for October 15-22, 2005 with an independent market research firm who committed to assist in Canada, France and Japan. The contractor later determined they were not able to perform the Canadian portion of the project, but remained committed to the France and Japan segments. Two FDACS representatives (Liz Gablehouse and Terry Fishman) traveled to the Parisian test site to provide supervision and guidance, confirm the integrity of the survey implementation, assist, and take photographs.



Shown on the right: Evelyn Fine, President of Fine Research and Marketing, Inc. / Mid-Florida Marketing and Research, Inc.

The contract stated:

Fine Research and Marketing, Inc. will conduct culinary focus groups in Japan, Canada and France and provide a written report of the findings. The Contractor will need to predetermine the most favorable locations for the focus groups, i.e.: schools and focus group facilities, provide recommendations and implement planning and logistics required to complete the task. Contractor will provide pre-payment facility costs, interpreters, shipping of fruit, logistical support, and pre-strategy costs. Contractor will provide direct logistical support on supplemental consumer research as needed. Note: The Contractor will provide transportation and resources to conduct each phase of operations for the team.

The project design, moderators discussion outline and taste test questionnaires were provided by FDACS in both English and French (see attachments). Early Sweets were shipped to Paris by FDACS. Other samples used in the focus groups (Pomelos and Red Grapefruits) were purchased from Parisian stores by the moderator.

Shipping Early Sweet to France

- In order to ship fresh fruit to the European/French market, a Phytosanitary Certificate established less than 14 days prior to the shipment of goods is required that states:
 - The fruit has come from a multi-grove block that has been inspected for canker since July 1, 2005.
 - The fruit has been packed at packinghouses under USDA program compliance.
- An additional declaration is required that states the fruit has been subjected to a chlorine or sodium orthophenylphenate treatment.
 - Chlorine treatment specifications: "Thoroughly wet for at least 2 minutes with a solution containing 200 parts per million sodium hypochlorite, with a solution maintained at a pH of 6.0 to 7.5."
 - Sodium orthophenylphenate treatment specifications: "Thoroughly wet with a solution containing sodium o-phenylphenate at a concentration of 1.86 to 2.0 percent total solution for 45 seconds if the solution has sufficient soap of detergent to cause a visible foaming action, or for 1 minute if the solution does not contain sufficient soap to cause a visible foaming action."
- Fruit must have no leaves, stems or stalks and the origin of the fruit must be indicated on the shipment and accompanying documents.
- Test shipment sent and rejected July 2005.
- Ms. Roselyne Gauthier, a representative from the Foreign Agricultural Service at the American Embassy in Paris, contacted the French Ministry of Agriculture in Paris, Mr. Emmanuel Savatte, for assistance expediting the Early Sweet shipment to France. Mr. Savatte offered to review the required documentation prior to shipment in an attempt to avoid problems at the port of entry. Documents were faxed to his attention via Ms. Gauthier on October 12, 2005.
- Early Sweet shipment of five boxes each containing approximately 40 pieces of fruit for a total of 200 pieces arrived on October 14, 2005 in Paris, France.
- The focus group facility coordinator, Christophe Malmanche of La Maison du Test, signed for the shipment and transported it to the test site.

The French Survey

The research took place in an upscale area of Paris near the Gare St. Lazare and the Opera Garnier in the Hotel Printemps in a seminar room that has a door that opens directly into the street. A trained recruiting team of four French women hired by La Maison du Test greeted people on the street and

convinced them to enter the seminar room and participate in the taste test survey. While the recruiters were at work outside, additional trained personnel remained in the seminar room conducting one-on-one surveys, cutting fruit and cleaning up.

Recruiters found that women were more willing to participate in the surveys than men. It was noted that the most common reason given by the men for declining, most of which were dressed in suits, was that they were in a hurry and headed to work. Most of the women, however, were in this area of the city to do morning shopping at the very popular Parisian department store, Au Printemps, and had time to do the taste test survey.

Of the 135 surveys conducted, 68.8% of the participants were female and 31.2% were male. The age groups best represented were 20+ (79.6%) and 14-19 (18.5%). Only 1.9% in the 10-13 age group took the survey.

About one third of those surveyed said they eat grapefruit once or twice a month, mostly for breakfast. About 40% said oranges were their favorite citrus fruit. (Grapefruit came in at 20.2%.) Over half said they eat their favorite citrus several times a week either for breakfast, as a dessert, or for a snack. When asked what they liked best about their favorite citrus, most cited flavor, health benefits, aroma and portability.

Early Sweet rated in the top 30-40 percentile on all the survey questions. On a scale of 1-5, one being the worst and 5 being the best, Early Sweet scored an overall rating of 4, a 4 when compared to other grapefruit, and a 3 when compared to a favorite citrus.

The feature participants liked best about Early Sweet was the flavor and juiciness. Other comments included:

- "It's not too bitter or acidic."
- "Very refreshing."
- "Unusually sweet."

When asked which sample (A: pommelo, B: red grapefruit, or C: Early Sweet) they liked best, over 33% chose Early Sweet. Over 36% wanted to eat Early Sweet several times a week, for breakfast, as a dessert, or as a snack.



Hotel Printemps seminar room entrance



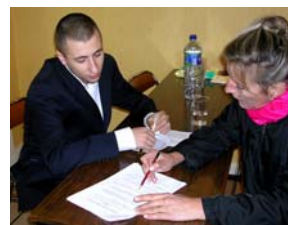
Early Sweet sample



Recruiters



Fruit prep



Survey room interior



Japan: November 29 – December 4, 2005



Population: 127,417,244

Age distribution: <15: 14.3%; 65+: 19.5%

Per capital GDP: \$29,400

Imports from the US: 14% of \$401.8 billion (2004)

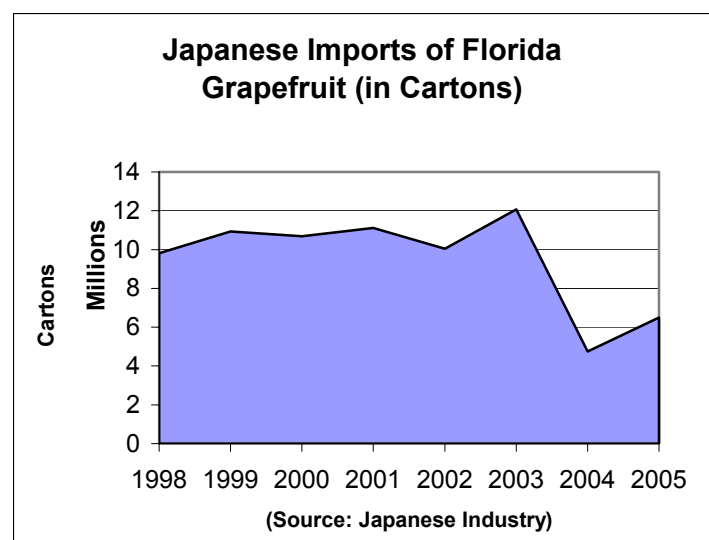
Fresh citrus fruit imports: totaled 342,191 boxes for the 12/29/03 – 01/04/04 season



Tokyo, Japan

Government-industry cooperation, a strong work ethic, mastery of high technology, and a comparatively small defense allocation (1% of GDP) helped Japan advance with extraordinary rapidity to the rank of second-most-technologically-powerful economy in the world after the US and the third-largest economy after the US and China. For three decades, overall real economic growth had been spectacular. Growth slowed markedly beginning in the 1990s and government efforts to revive economic growth have met with little success. Despite that, Japan continues to represent one of the best opportunities in the world for U.S. exporters of food products. The Japanese place great importance on quality, appreciate taste and all of its subtleties—and will pay for it, are well-educated and knowledgeable about food and its many variations, care a great deal about seasonal foods and freshness, and are very health conscious.

Florida citrus products are very successfully marketed in Japan, attributed to reliably supplying high quality products with exceptionally good taste and looks. During the 2002/03 season, Florida exported 10,042,393 cartons (175,707 MT) of white and colored grapefruit to Japan. In the 2004/05 season, Florida shipped 4,755,972 cartons of fresh grapefruit to Japan, only 40% of what they normally ship, due to damage caused by hurricanes. Japanese traders hoped for a good crop in the 2005/06 season, however, hurricane Wilma hit Florida's citrus region in late October 2005 and caused significant damage to the groves again. Because of short supplies for two consecutive years, Japanese traders show concerns about marketing Florida grapefruit.



Independent Contractor

This mission was originally scheduled for September 27 through October 3, 2005 with an independent market research firm who committed to assist in Canada, France and Japan. The contractor later determined they were not able to perform the Canadian portion of the project, but remained committed to the France and Japan segments. When the Florida citrus crop ran late, then citrus canker and shipping requirements created additional delays, the groups were rescheduled to take place November 29 through December 4, 2005. Two FDACS representatives (Dan Sleep and Tom Thomas) traveled to the Tokyo test site to provide supervision and guidance, confirm the integrity of the survey implementation, assist, and take photographs.



The contract stated:

Fine Research and Marketing, Inc. will conduct culinary focus groups in Japan, Canada and France and provide a written report of the findings. The Contractor will need to predetermine the most favorable locations for the focus groups, i.e.: schools and focus group facilities, provide recommendations and implement planning and logistics required to complete the task. Contractor will provide pre-payment facility costs, interpreters, shipping of fruit, logistical support, and pre-strategy costs. Contractor will provide direct logistical support on supplemental consumer research as needed. Note: The Contractor will provide transportation and resources to conduct each phase of operations for the team.

Evelyn Fine, President of Fine

Research and Marketing, Inc./ Mid-Florida Marketing and Research, Inc.

Shipping Early Sweet to Japan

- In order to ship fresh fruit to the Japanese market, a Phytosanitary Certificate is required.
- Citrus fruit originating in Florida may be certified based upon Methyl Bromide fumigation, several cold treatment methods, or upon a fruit fly free area scheme. Details of the certification procedures are found in the document entitled "Protocol for the exportation of fresh fruits from Florida to Japan" found in EXCERPT, a database maintained by the USDA/APHIS.
- Procedures for the issuance of Phytosanitary Certificates (PCs) for citrus destined to Japan are:
 - From an area not trapped for Caribfly
 - Methyl Bromide fumigation (approved for use by Japan but not being used at this time)
 - Cold treatment fruit (standard cold treatment can be used)
 - PCs may be issued only at the port of export. Contact PPQ in Fort Pierce, FL (561-464-1038) or PPQ, Tampa, FL (813-228-2121) for certification procedures.
 - Effective immediately (July 2005), contact Paul Hornby, Soso, Florida, when receiving requests for in-transit cold treatment (CT) certification of Florida grapefruit to Japan.
 - From an area trapped for Caribfly
 - PCs can be issued only at the port of export for fruit destined to depart a port in a state other than Florida. PCs are based upon the "Export Citrus Fruit Inspection Certificate" from FDACS. Contact PPQ in Fort Pierce, FL (407-464-1038) for certification procedures. Shipments of individual cartons (sample shipments) must be sealed, utilizing a button seal.
 - PCs may be issued at the packinghouses by qualified DPI inspectors for "Through" commercial shipments destined to depart Florida ports only. This includes airfreight, overland container, and sample shipments. The container must be sealed and the seal number recorded on the PC for all "Through" shipments. Individual cartons of commercial sample shipments must be sealed utilizing a button seal. ("Through" shipments are fruit that have been packed, put in a sealed container, and shipped directly to the port of export without any transloading.)

- For early season certified fruits: “Having been harvested during the period August 1 to December 20 and inspected by the US PPQ, the subject shipment destined for Japan is not believed to be infested by the Caribbean fruit fly.”
 - The PC must also indicate the following information in the place of origin section (block 13): Florida, U.S.A.; Florida designated free area numbers for Caribbean fruit fly and the number of cartons from each area. In the distinguishing marks section (block 12): seal numbers if appropriate.
- Test shipment sent and rejected July 2005.
 - Ms. Debbie Howard, a representative from the office of Mr. A. Robert Deter, Managing Director of the Japanese Market Research Network, contacted the customs officials at Narita Airport, for assistance expediting the Early Sweet shipment to Tokyo. The officials requested that original phytosanitary certification documents be mailed (a faxed version is not acceptable) via express mail to: UPS Narita Branch, Attention: Mr. Yamashita, Dai-4 Kamatsu Building 201, 2071 Komaino-Azadainota, Narita-shi, Chiba, 282-8691, Japan. Documents were sent to this specified address on September 24, 2005.
 - Early Sweet shipment of five boxes each containing approximately 40 pieces of fruit for a total of 200 pieces arrived on September 26, 2005 in Tokyo, Japan. A 10% citrus import duty tax was applied to the shipment. (All duties are charged on a Cash in Full [CIF] basis and are not subject to further reductions outside the next round of WTO negotiations.)
 - Ms. Debbie Howard signed for the shipment and transported it to the test site for cold storage.

The Japanese Survey

The research took place in an upscale area of Tokyo known as Shibuya-ku. Largely a commercial and entertainment district, Shibuya has achieved great popularity among young people in the last thirty years. There are several famous fashion department stores in Shibuya, and many are near Shibuya Station. The plaza in front of JR Shibuya Station is known as Hachikō Square, after a loyal dog who faithfully awaited its master's return at the station for years on end and is now commemorated with a statue.

Shibuya is also famous for its intersection crossing, reportedly the world's busiest, which is located in front of Shibuya Station and uses a four-way stop to allow pedestrians to inundate the entire intersection. Three large TV screens mounted on nearby buildings overlook the crossing. The Starbucks store overlooking the crossing is reportedly the busiest in the world.

During the late 1990s, Shibuya was known as the center of the IT industry in Japan, and was often called "Bit Valley" in English, a literal translation of its Japanese name. Eighteen embassies are also located in Shibuya.

The Japanese Market Resource Network used a seminar room with a door that opened directly into the busy street. A trained recruiter greeted people on the street and convinced them to enter the seminar room and participate in the taste test survey.



Shibuya intersection crossing



Left: Hachiko's statue at Shibuya Station is a favorite meeting spot. Right: Early Sweet test site entrance

While the recruiter was at work outside, additional trained personnel remained in the seminar room conducting one-on-one and small-group surveys.

The project design, moderators discussion outline and taste test questionnaires were provided by FDACS in both English and Japanese (see attachments). Early Sweets were shipped to Tokyo, Japan by FDACS. Other samples used in the focus groups (Pomelos and Red Grapefruits) were purchased from Japanese stores by the moderator



Early Sweet grapefruit on the top shelf. Pre-cut samples P (Pomelo), Q (Early Sweet), and R (Red Grapefruit) shown left to right on the second shelf.



Respondents were given tastes of each fruit in a prescribed order. All respondents tasted fruit in the same order:

- Sample P: Pomelo (*A in US, Canada and France*)*
- Sample Q: Early Sweet (*C in US, Canada and France*)*
- Sample R: Red Grapefruit (*B in US, Canada and France*)*

**Please note:* The samples were renamed and the facilitators switched the taste test order. All other elements regarding the implementation of the taste test and survey remained unchanged.

The majority of the 50 people surveyed were age 35-44 (39.7%) with children. Other demographic age groups well represented included age 25-34 with children (27.7%) and age 19-29 singles (24%).

Half the participants in all age categories reported eating grapefruit less than once per month, while about a third said they ate grapefruit once a week, mostly for dessert. This is quite significant because, due to the limited supply of Florida grapefruit shipments to Japan in 2004/05, the fruit was largely purchased for high priced gifts during Japan's year-end gift-giving season. This bit of information indicates that this group of consumers is affluent enough to afford to purchase higher priced grapefruit on a regular basis.

About 50% said oranges were their favorite citrus fruit. (Grapefruit came in a close second around 45%) Over half said they eat their favorite citrus several times a week either for a dessert, or for a snack. When asked what they liked best about their favorite citrus, most cited flavor, health benefits, aroma and availability.

On a scale of 1-5, one being the worst and 5 being the best, Early Sweet scored an overall rating of 3.5, a 3.3 when compared to other grapefruit, and a 3.2 when compared to a favorite citrus.

The feature participants liked best about Early Sweet was the flavor and freshness. Other comments included:

- "It's not acidic."
- "Sweet like a tangerine."

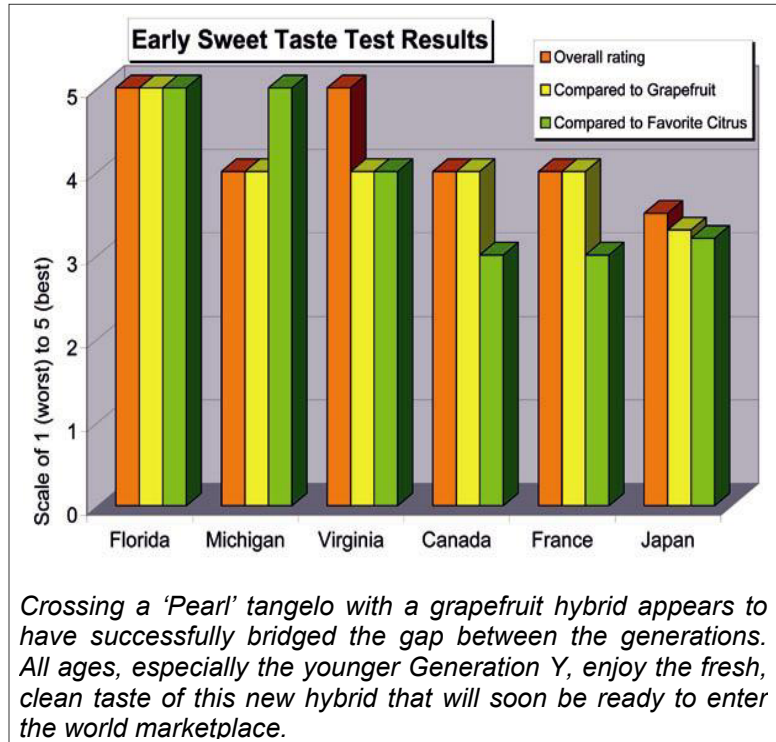
Interestingly enough, when asked which sample (P: pomelo, Q: Early Sweet, or R: red grapefruit) they liked best, 20 out of 50 chose the pomelo. Red grapefruit came in second at 16 out of 50 and Early Sweet came in third at 14 out of 50. This is an indicator that the Early Sweet should not be marketed as a grapefruit in Japan. The unusually sweet taste is not what the Japanese are looking for in a grapefruit. An alternate approach that stresses the tangerine note would appeal.

Conclusions

This research shows Early Sweet as the clear winner, scoring highest in the “liked best” category when compared to the Pomelo/White Grapefruit and the Red Grapefruit, especially among the younger respondents and those adults who typically do not care for grapefruit. The potential success for Early Sweet as a new product line for citrus growers in the grapefruit market was confirmed on an international level by these findings.

Although the research completed to date has shown positive results in favor of Early Sweet in all selected domestic and international locations, additional consumer acceptance research is still necessary. Marketing techniques will have to be studied and modified to fit consumer profiles and preferences in different areas of the world.

One technique that has proven effective time and again everywhere is in-store promotions that include demonstrations and free taste samples. Sales figures of the featured product have been shown consistently to rise during the promotion period. This would be especially pertinent and necessary for Early Sweet, due to its mottled outer appearance. Cuttings and sample tasting would improve consumer acceptance levels.



Taste remains the top purchase influencer with fresh produce purchases, followed by health benefits, appearance, price and habit. According to the Produce Marketing Association (PMA), for years the produce industry has educated consumers on the nutritional and health benefits of produce. Now the challenge is to offer shoppers new flavors and textures to engage their senses. As marketers, the focus should go beyond getting produce from 'seed to store' and be devoted toward getting fruits and vegetables 'from seed to stomach' by consistently delivering a flavorful and memorable experience. According to the research done to date, Early Sweet has the potential to fulfill that initiative.

Canadian markets and consumer preferences most closely mirror those of the United States. Its close proximity to the U.S. and less restrictive shipping regulations for fresh produce imports make Canada a more feasible option for Early Sweet's introduction to the international retail market. Fully 75% of the fresh produce sold in Canada is imported, two thirds of which is from the United States. Canadians are familiar with U.S. produce and very open to purchasing it when it is available, fresh and appealing in appearance.



Parisian supermarket citrus display

If the results found in France are any indication, Early Sweet will be well received in the European Union (EU) produce market. Most of the countries in the EU are familiar with and import large amounts of U.S. grapefruit, mostly from Florida. However, there exists fierce competition from Israeli citrus products on the EU market. The largest hurdle facing Early Sweet exporters is strident new product certification and shipping requirements. Although France conforms to all EU regulations, it has yet to completely harmonize all of its certificates. Thus, an exporter must provide language in its export certificates that addresses both EU and French requirements. Once that is accomplished, marketing Early Sweet to consumers very attuned to quality and appearance is the next hurdle.

The amount of 2005/06 grapefruit shipments from Florida to Japan is predicted to be significantly below average for the second consecutive year. Supply shortages caused Japanese importers to search desperately for alternate suppliers in Texas, California and Arizona. Japanese traders will hold back major sales promotions of Florida product until the new year when sufficient fruit becomes available. Florida grapefruit is much sweeter and more appealing to Japanese consumers than the alternate state suppliers can provide, so realistically the market lost can be recaptured—if the Israel Sweetie doesn't provide too much interference.

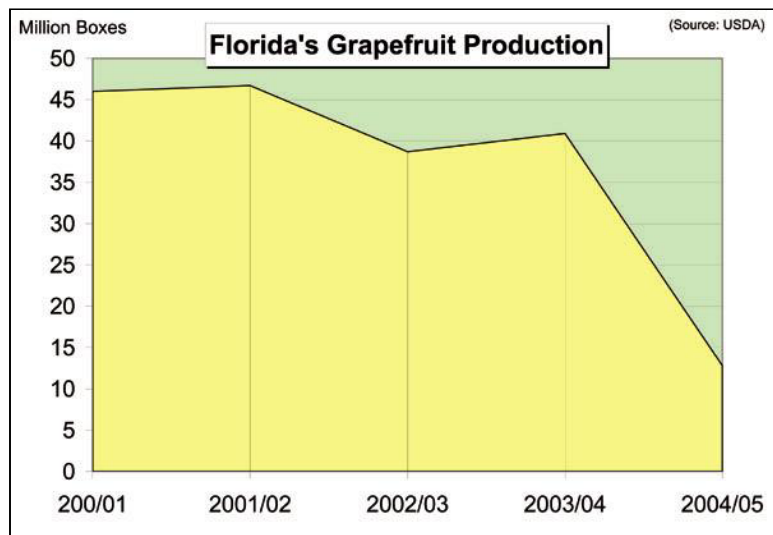


Japanese supermarket citrus display

As with France and the EU, fresh produce requirements for exports to Japan are restrictive and can prove daunting. The impact of recent food safety issues continues to have unprecedented influence in the Japanese market. Japan will also implement new regulations on May 29, 2006 for residues of agricultural chemicals in food and random samples from each shipment of produce imported will be tested for more residues. The expense, both in time and money, might seem excessive at first, but would be worth the investment in the long run for Early Sweet producers if their product is accepted by Japanese consumers.

Important factors to consider when marketing Early Sweet to Japanese consumers is their concern with food safety and traceability and they are highly brand conscious. Labeling similar to FDACS' Fresh from Florida produce identity program would address that. They place great importance on quality and care a great deal about seasonal foods and freshness. Since they appreciate taste and all of its subtleties (and will pay for it), a new variety like Early Sweet might pique their curiosity and interest.

Fresh citrus is a commodity that has undergone periods of over-production that depressed prices and periodically disrupted by freeze events, hurricanes, citrus canker and fruit fly infestation, resulting in severe supply inconsistencies. In recent years the citrus industry was also battered by the popularity of low-carb diets, which helped bring demand down. Unlike many produce industries, there can be significant costs associated with exit from citrus production, limiting growers' season-to-season ability to adjust production levels. Permanent exit entails, at minimum, the cost of tree removal. There are also sunk costs at the packaging/processing levels that contribute to continued excess capacity within the industry.



Florida's grapefruit growers received record prices for their fruit in 2004/05, but the outlook for the upcoming season appears bleak. Storms, hurricanes, citrus canker and urban development are blamed for destroying an estimated 80% of last season's crop. The Indian River area alone lost over 4 million trees. While insurance, grants and loans will help the grapefruit industry, some losses are likely to go unrecovered and uncounted. Considering all factors, most grapefruit growers expect a 2005/06 crop at or not much above 20 million boxes. Florida citrus growers are looking for assurance and assistance, not abject risk and uncertainty.

The capital investment and entrepreneurial risk associated with establishing grapefruit groves and marketing a new grapefruit variety is historically high. Unless proper support, education and planning are provided, citrus growers will not feel comfortable striking out on new ground by planting Early Sweet groves. Methods recommended to minimize the risk for future Early Sweet producers include:

- Continue to study the citrus market and track citrus consumer buying trends worldwide.
- Conduct a feasibility analysis and formulate a business plan for potential Early Sweet producers in Florida.
- Enter into a “licensed technology” agreement (“organic patent”) with the USDA Early Sweet Research Coordinators while the Early Sweet cultivar is still federally subsidized.
- When it’s ready, release the Early Sweet cultivar only to select Florida nurseries for public distribution to prevent flooding the market with this new variety.

Citrus growers converting from a common citrus variety to one like Early Sweet would have a clear advantage because their product would occupy a two month monopoly in the citrus market production window. Early Sweet is the only sweet grapefruit variety available in September and October. Growing Early Sweet offers producers another market where they can better utilize their resources by spreading crop harvest over a wider time frame during the year.

The current production scale for the Early Sweet variety is small because it is still being grown for research only and has not been released for public use. The potential production scale is medium at best and will never rival juice acreage, but it will come close to current Florida grapefruit production. This does not pose a threat to future producers, but instead sheds a positive light on the grapefruit industry by extending availability windows. Secondary sectors throughout the marketing chain that may also benefit are distributors, by giving them a new product to carry, and consumers, by providing them with another choice for a high-quality fresh citrus product.

Contacts

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World Almanac and Book of Facts 2006, The; St. Martin's Press, New York, NY; 2006.

Budget information

Phase One: Research Preparation

	<u>FDACS</u>	<u>FSMIP</u>
1) Development of international survey instrument by one professional staff 165 hours @ \$22.86/hr. to research and design testing procedure instrument	\$ 3,771.90	\$ 0
2) Pre-test of survey instrument 100 hours @ \$22.86/hr to pretest procedure and instrument, revise, etc.	\$ 2,286.00	\$ 0
3) Printing and distribution of survey instrument	\$ 3,000.00	\$ 0
4) Translation of international survey instrument Contract for services for translation to both Japanese and French	\$ 0	\$ 373.00
Total:	\$ 9,057.90	\$ 373.00

Phase Two: Research

1) Contracts with market research firm for consumer surveys	\$ 9,800.54	\$23,226.12
2) Personnel costs for 6 professional staff 516 hours total @ \$22.86/hr to contact research agencies, negotiate, and finalize contract for services, make travel arrangements and conduct surveys in Japan, Canada and France	\$11,795.76	\$ 0
3) Travel expenses Connected with conducting surveys in Japan, Canada and France	\$ 0	\$13,400.88
4) Mailings--- cost of new grapefruit and shipment cost to survey sites	\$ 0	\$ 0
5) Supplies and overhead	\$ 2,500	\$ 0
Total:	\$24,096.30	\$36,627.00

Phase Three: Post Research Analysis And Publications

1) Write and layout publication 240 hours @ \$22.86/hr by one FDACS professional staff	\$ 4,800.60	\$ 0
2) Print publication on survey results 100 each, four color with graphics	\$ 200.00	\$ 0
3) Mailings to Florida Citrus Industry	\$ 300.00	\$ 0
4) Supplies and overhead	\$ 2,000	\$ 0
Total:	\$ 7,300.60	\$ 0

Phase Four: Reviewing Market Research Findings With Citrus Producers

This report was published on an internet web site that was specially created and made available to the Florida citrus industry. Web address: <www.florida-agriculture.com/earllysweet>. This was a decision made in order to reach a broader audience in a more efficient manner.

1) Strategy Meetings between 4 FDACS professional staff and industry representatives to review market research 132 hours @ \$22.86/hr preparation, meeting and travel time	\$ 3,017.52	\$ 0
2) Personnel Two support staff: 80 hours each @ \$17.35/hr for meeting prep	\$ 1,561.50	\$ 0
3) Publish survey results and final report on an Internet website. Two professional staff: 96 hours total @ \$22.86/hr	\$ 2,194.56	\$ 0
4) Supplies and overhead	\$ 2,500.00	\$ 0
Total:	\$ 9,273.58	\$ 0

Project Total Summary

	Expenses	FDACS	FSMIP
1) Phase One:	\$ 9,430.90	\$ 9,057.90	\$ 373.00
2) Phase Two:	\$60,723.03	\$24,096.30	\$36,627.00
3) Phase Three:	\$ 7,300.60	\$ 7,300.60	\$ 0
4) Phase Four:	\$ 9,273.58	\$ 9,273.58	\$ 0
Project Total	\$86,728.38	\$49,728.38	\$37,000.00

The Florida Department of Agriculture and Consumer Services provided matching funds under the Federal-State Marketing Improvement Program of the Agricultural Marketing Service, U.S. Department of Agriculture.

Attachments (provided in both hard copy and digital formats)

- Purchase order for translation services for surveys in French and Japanese (*pdf*)
- Surveys in English, French and Japanese (*pdf*)
- Purchase order for market research in Canada (*pdf*)
- Contract for market research in France and Japan (*pdf*)
- Contractors' market research reports for Canada, France and Japan (*pdf and Powerpoint*)
- Budget Information Forms 424 and 424A (*pdf*)